

IN THE SPECIFICATION:

Please amend the Specification in the following replacement paragraphs:

Page 2, line 3 of the second fully paragraph, after "He-Ne" insert laser:

"In a conventional interferometer, an etalon cavity is formed between a Fizeau reference flat and the test surface. An expanded, highly collimated beam from an single-mode He-Ne laser is reflected from this combination and captured by a camera. During a measurement sequence, the spacing between the reference flat and test surface is varied by about a half-wavelength by translating the reference flat with PZT actuators. Typically 5 – 10 steps are taken over the half-wavelength translation. The resulting interference patterns are captured by the camera, analyzed, and the phase of the interference extracted for each point on the test optic. Since the wavelength of the light is precisely known, the physical shape of the test surface can be determined (relative to the reference flat, which is usually assumed to be flat)."

Page 3 line 28, delete [is a];

"FIG. 2 [~~is-a~~] shows a series of recordings of interference patterns."

Page 8, line 20 replace " $\lambda/8 !$ " with  $\lambda/8$ .

"The interferogram for a second etalon, FIG. 5A and 5B, shows a significant amount of wedge. Adding the horizontal and vertical tilts quadratically, the wedge has a magnitude of about 0.12 wave ( $\lambda/8 !$ ) ( $\lambda/8$ ). The plates appear relatively flat; however, this etalon exhibited such poor finesse when installed into an etalon wavemeter that fringes were hardly visible. This was the result of the very large wedge shown in FIG. 5B."